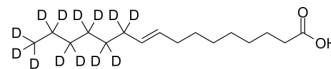


Palmitelaidic acid-d13

Cat. No.:	HY-N2341S
CAS No.:	2692623-91-7
Molecular Formula:	C ₁₆ H ₁₇ D ₁₃ O ₂
Molecular Weight:	267.49
Target:	AMPK; PPAR; Glucokinase
Pathway:	Epigenetics; PI3K/Akt/mTOR; Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Palmitelaidic acid-d13 is the deuterium labeled Palmitelaidic Acid. Palmitelaidic Acid (9-trans-Hexadecenoic acid) is the trans isomer of palmitoleic acid. Palmitoleic acid is one of the most abundant fatty acids in serum and tissue.
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.
- [2]. Frigolet ME, et al. The Role of the Novel Lipokine Palmitoleic Acid in Health and Disease.
- [3]. de Souza CO, et al. Palmitoleic Acid Improves Metabolic Functions in Fatty Liver by PPAR α -Dependent AMPK Activation. *J Cell Physiol*. 2016 Dec 7. doi: 10.1002/jcp.25715.
- [4]. Yang ZH, et al. Chronic administration of palmitoleic acid reduces insulin resistance and hepatic lipid accumulation in KK-Ay Mice with genetic type 2 diabetes. *Lipids Health Dis*. 2011 Jul 21;10:120.

Caution: Product has not been fully validated for medical applications. For research use only.

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